This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT .
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

WHAT IS CLAIMED IS:

- 1. A graphite powder containing 0.01 to 5.0 wt% of boron and having a looped closure structure at an end of a graphite c-planar layer on the surface of a powder, with the density of the interstitial planar sections between neighboring closure structures being not less than $100/\mu m$ and not more than $1500/\mu m$.
- 2. The graphite powder according to claim 1 wherein the distance between c-axis (002) planar lattice distance (d002) as found by the lattice constant precision method by X-ray diffraction is not more than 3.3650 Å.
- 3. The graphite powder according to claim 1 or 2 wherein the specific surface area is not more than 1.0 m²/g, the crystallite diameter is 100 to 2000 Å and/or the volume cumulative mean particle size as measured by the laser diffraction scattering method is 5 to 35 μ m.
- 4. A method for producing a graphite powder according to any one of claims 1 to 3 comprising:
 - a step of adding boron; wherein
- a carbon material pulverized at an elevated speed before and/or after carbonization is heat-treated at a temperature exceeding 1500°C for graphization.
- 5. A method for producing a graphite powder according to any one of claims 1 to 3 comprising:
 - a step of adding boron; wherein
 - a carbon material pulverized before and/or after carbonization is heat-treated

at a temperature exceeding 1500°C for graphization,

the heat-treated carbon material is surface-processed under a condition of scraping the surface of the produced graphite powder; and wherein

the surface-processed carbon material is heat-treated in an inert gas at a temperature exceeding 800°C.

6. The method for producing a graphite powder according to claim 5 wherein the heat treatment under the condition of scraping the surface of the produced

graphite powder is oxidating heat treatment.

- 7. The method for producing a graphite powder according to any one of claims 4 to 6 wherein the carbon material is obtained by carbonization of mesophase globules and/or the bulk mesophase.
- 8. A negative electrode material of a lithium ion secondary battery mainly composed of graphite powders according to any one of claims 1 to 3.
- 9. A lithium ion secondary battery including a negative electrode manufactured from a negative electrode material according to claim 8.